EMCAL MIP CALIBRATION REVIEW

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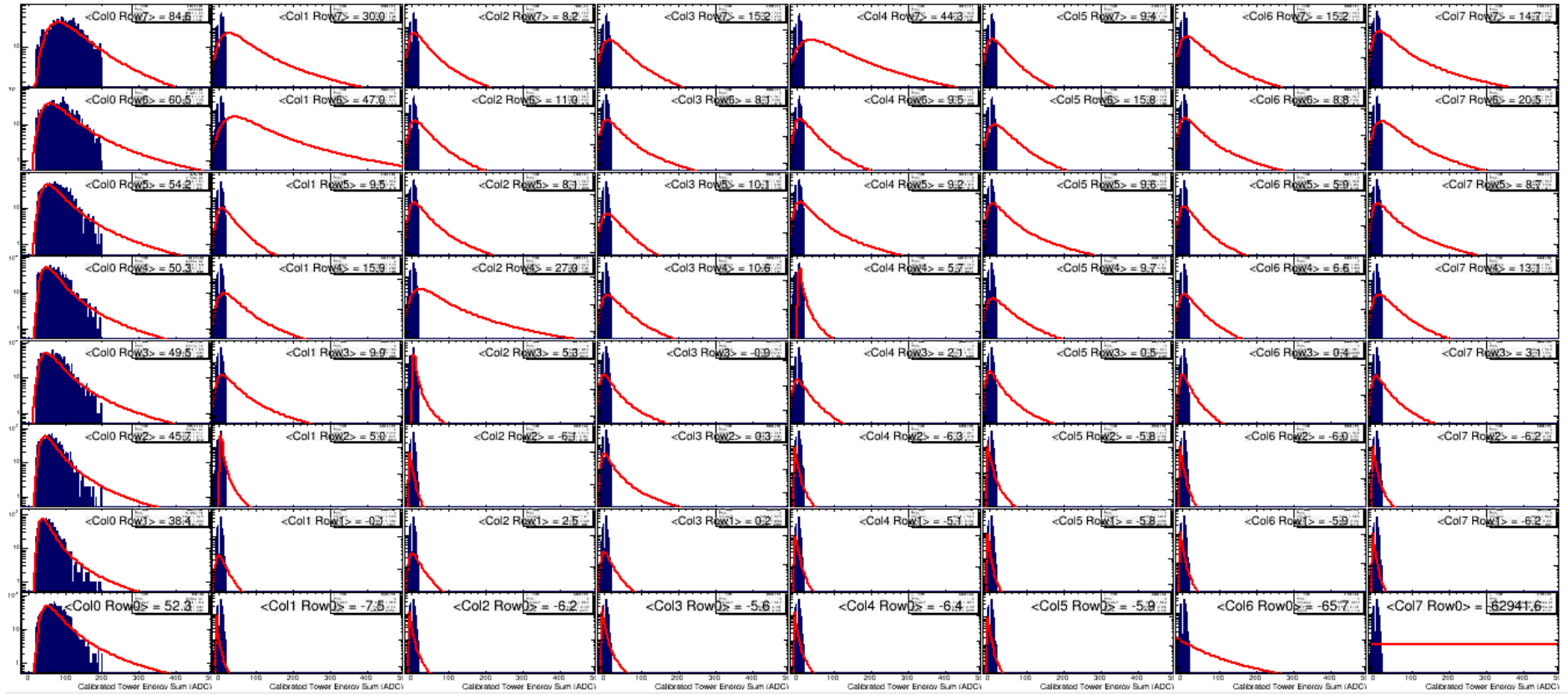
EMCal MIP Calibration

- EMCal nose down with one column centered in the beam path. Repeat for all columns
  - 3 sets of data with EMCal nose down, not rotated
  - 2 sets nose down, then rotated 180 deg.
- Apply event selection criteria
- Fit raw ADC spectra to get MIP peak
- MIP peak temperature dependence

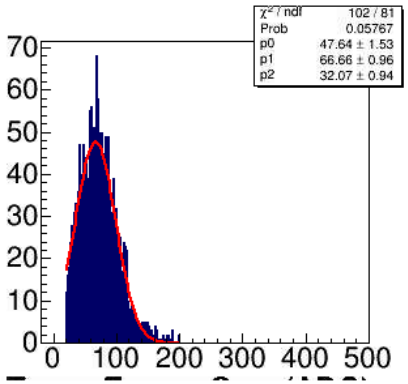
Event Selection Criteria

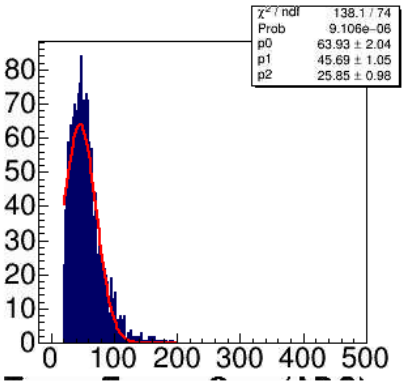
- Vertical and horizontal hodoscopes each have energy > 30
- For EMCal column of interest: all rows each have 20 < ADC < 200
- Other columns: all rows each have ADC < 20

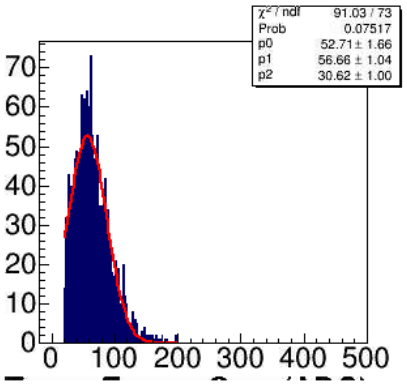
Resulting EMCal ADC Spectra

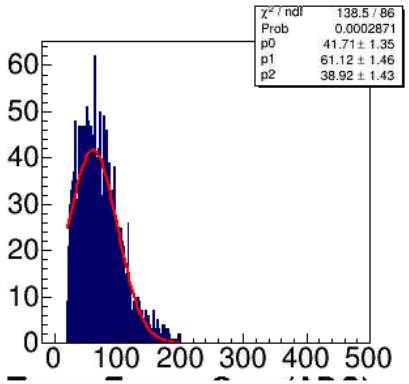


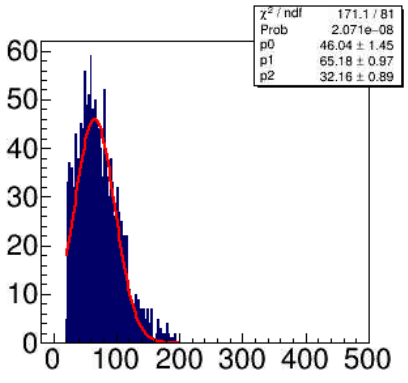
ADC Spectrum Fits

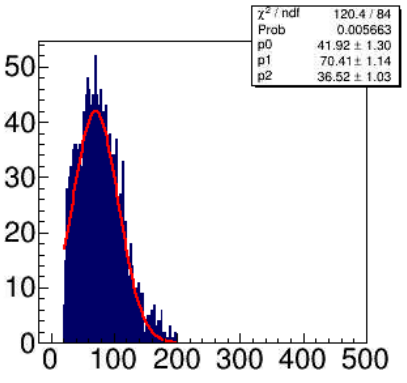


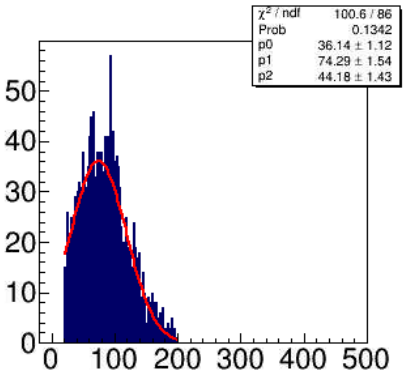


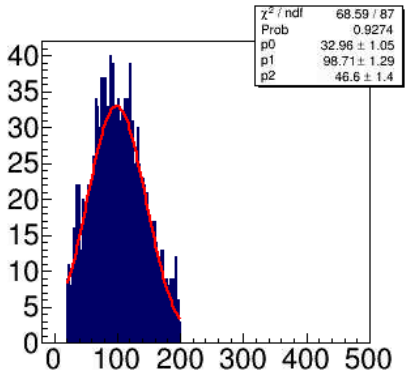




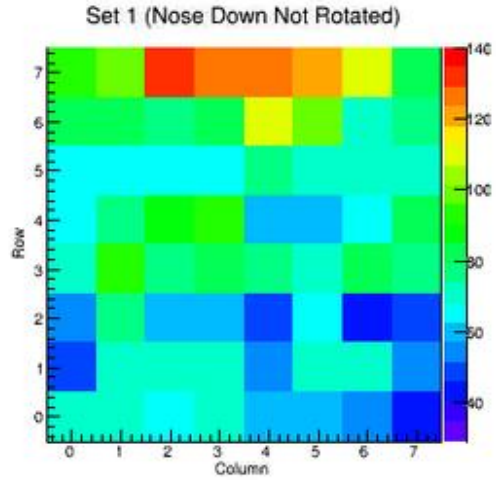


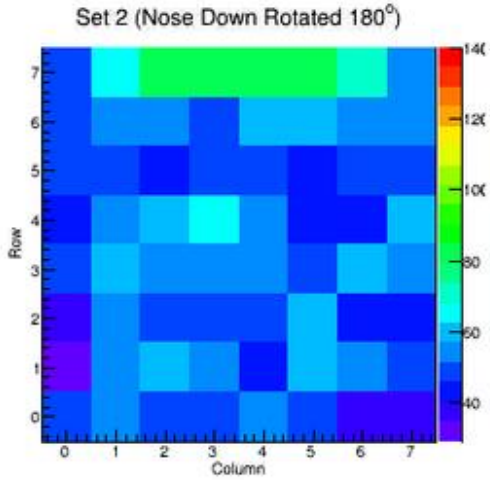


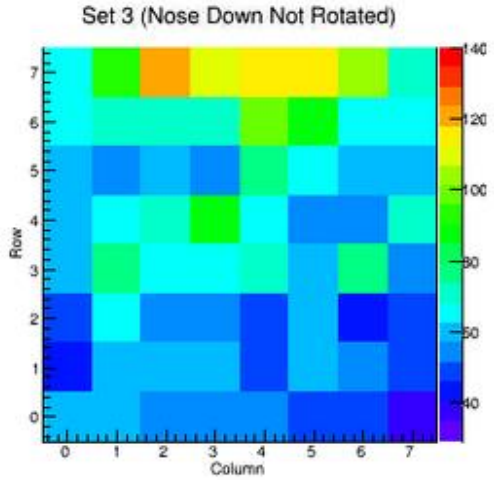


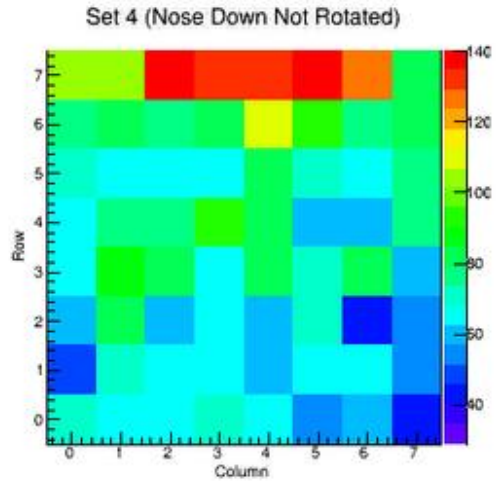


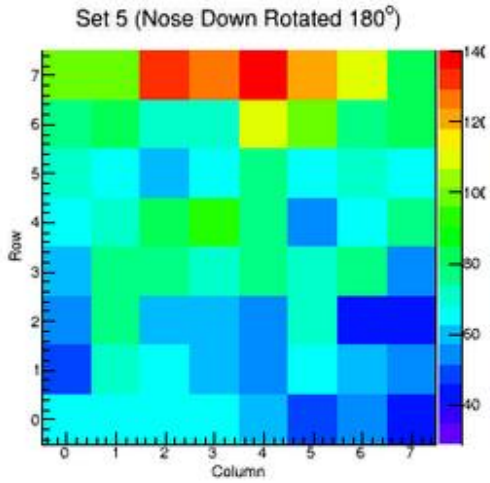
Absolute MIP Peak



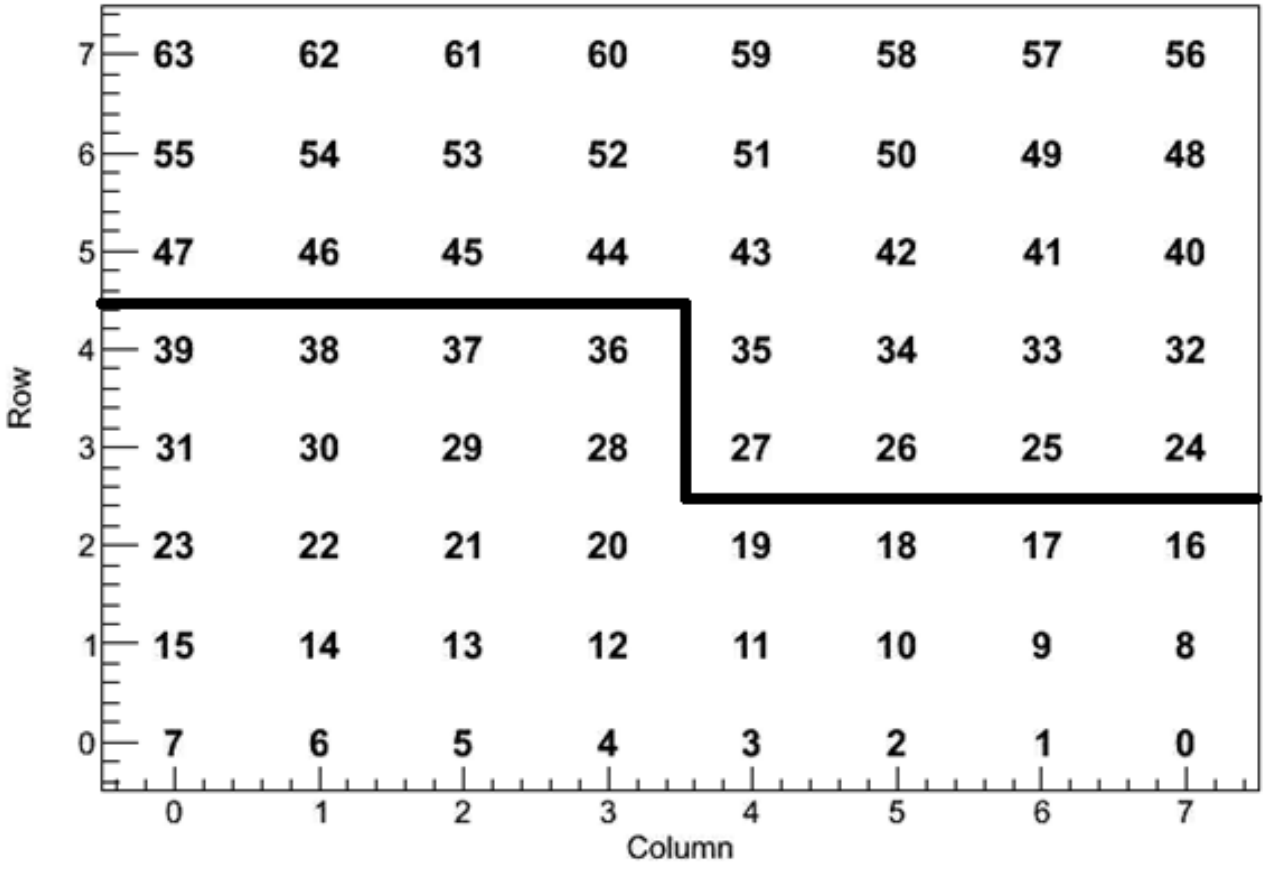




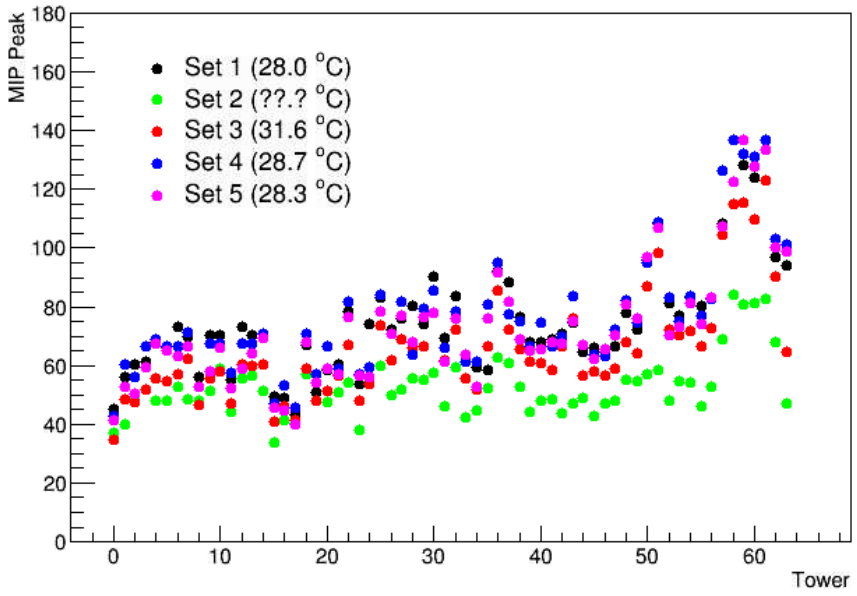


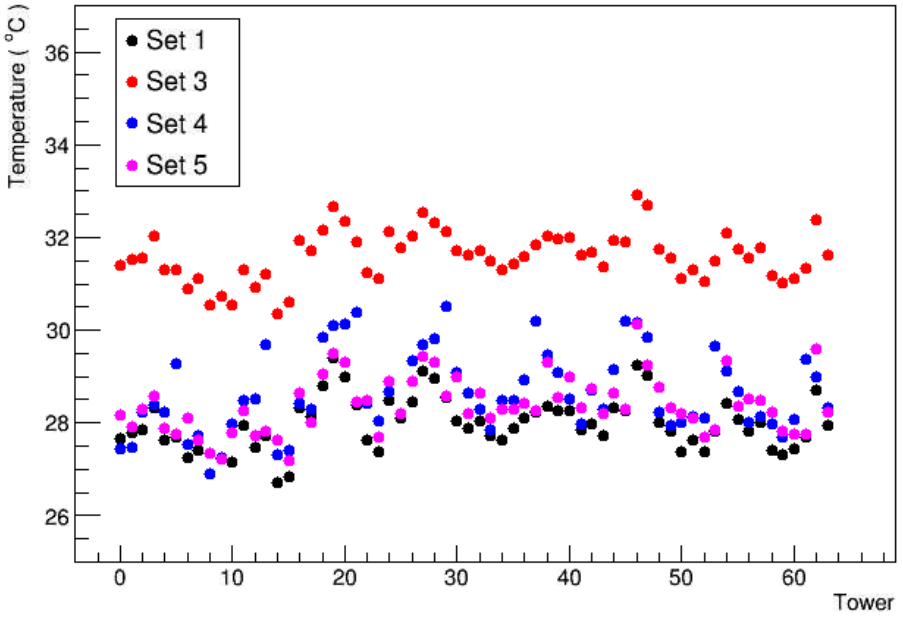


EMCal Tower Map

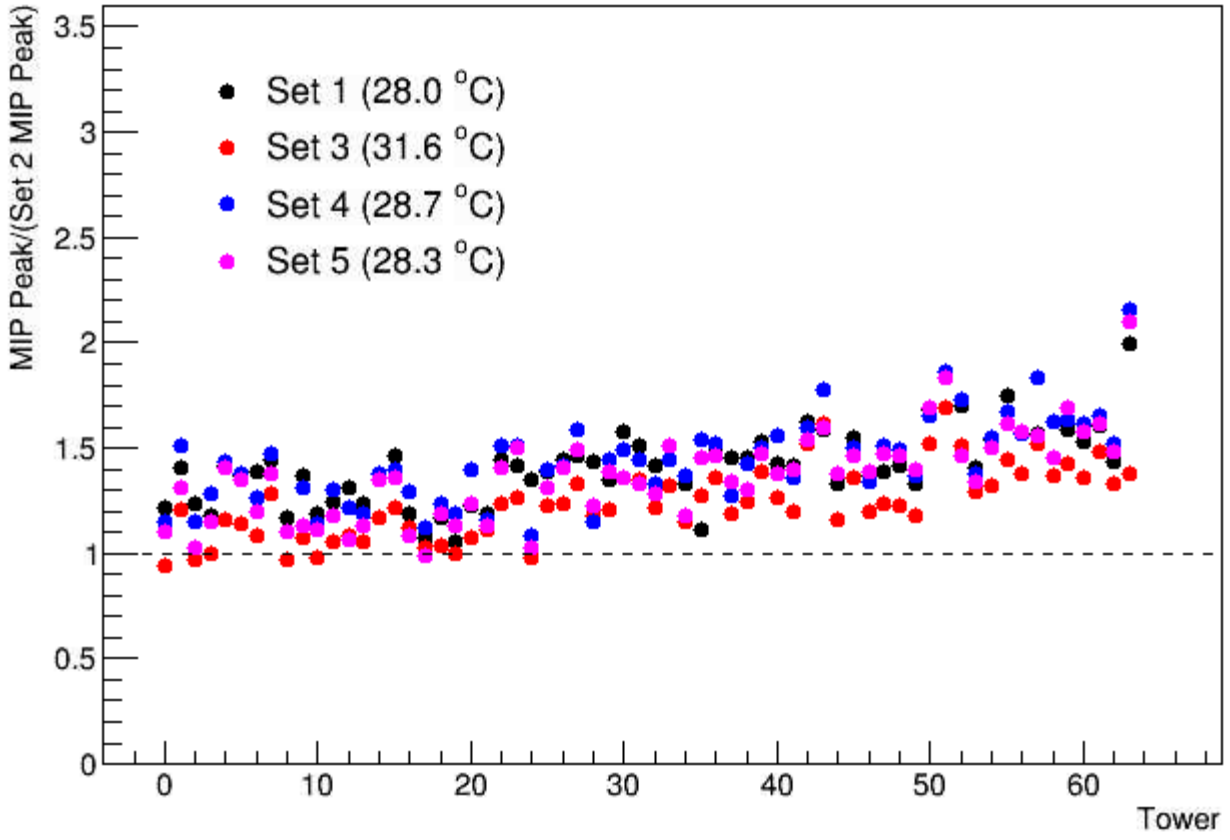


MIP Peak and Temperature





MIP Peak/Set 2



Summary

- Set 2 with nose down, then rotated 180° gives the most uniform calibration
- Tower-to-tower variation may be due to THP modules
- Look at ADC spectra with hodoscope cuts only